STATE OF CALIFORNIA

ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	)	Docket: 99-AFC-2
	)	
Application for Certification of the Three Mountain Power Project	)	**REPLY BRIEF OF COMMISSION STAFF**
	)	

I. AIR QUALITY AND PUBLIC HEALTH

A. Additional meteorological data is not needed.

BRG contends that one year of site specific data is required for licensing by federal requirements, citing Appendix W of 40 CFR 51, Section 9.3.1.2.a. Although BRG's citation is accurate, its conclusion overlooks other portions of the federal guidelines which indicate that no such data is needed where specified modeling demonstrates no violations of federal requirements.

Applicant modeled emissions using meteorological data from Brush Mountain. (12/18 RT 141.) When the sufficiency of the Brush Mountain data was challenged, applicant modeled emissions with a screening model using worst-case meteorological data. (12/18 RT 142.) This modeling indicated no violations of the federal National Ambient Air Quality Standards (NAAQS) or Prevention of Significant Deterioration (PSD) requirements. (Exh. 64, p. 43; Exh. 69, p. 24.) Staff testified that this is consistent with federal requirements, and that EPA confirmed that the applicant's approach was sufficient. (12/18 RT 232.) Applicant's witness testified in accord. (12/18 RT 142.)

The approach is consistent with 40 CFR 51 Appendix W, which at Section 2.3.a provides as follows:

> In addition to the various classes of models, there are two levels of sophistication. The first level consists of general, relatively simple estimation techniques that provide conservative estimates of the air quality impact of a specific source, or source category. These are screening techniques or screening models. The purpose of such techniques is to eliminate the need of further more detailed modeling for those sources that clearly will not cause or contribute to ambient concentrations in excess of either the National Ambient Air Quality Standards (NAAQS) or the allowable prevention of significant deterioration (PSD) increments.

BRG asserts, without citation of authority, that no substitute modeling could be performed without "comprehensive review and consensus," a written record, and public notice. However, no such protocol is required by law, and the applicant's approach to modeling was discussed at workshops after issues were raised concerning the sufficiency of the Brush Mountain data. Applicant provided all parties the results of its screening modeling last spring, months prior to hearings. No issues with the modeling were raised then, and none are raised now beyond the misconception that screening modeling cannot be used when sufficient meteorological data is unavailable.[1]

B. Industrial source emissions in Burney have not significantly changed.

BRG argues that the 1998 preliminary point source inventory numbers for the Burney basin show that industrial emissions have increased. No testimony supported this point. The uncontroverted testimony of the Staff and air district is that the industrial emissions inventory has not changed in any significant way. (12/18 RT 174-185.) BRG's principle argument for this increase—that 1998 PM10 emissions were 115 tons per year (TPY)—is answered by testimony

[1] BRG's Opening Brief asserts that the Brush Mountain weather data cannot be used because of requirements of 40 CFR 51, Appendix W, Section 9.3.2.2. However, nothing in that section would prohibit use of the Brush Mountain data. Staff became concerned about the sufficiency of the Brush Mountain data based on the requirements of a subsequent section, Section 9.3.3.2 regarding site-specific data collection. This section references other documents recommending criteria for instrumentation, data recording, and completeness, among other things. Although the Brush Mountain data was largely consistent with the recommendations of the referenced documents, there were also shortcomings in the data that led Staff to request the further analysis. The BRG witness testified that he was unaware of these referenced documents as the basis for determining the sufficiency of the Brush Mountain data. (12/18 RT 252.) Unfortunately the BRG witness understood neither the history of the data dispute nor the regulatory basis for requiring further analysis; he also did not understand why the further analysis was sufficient.

of air district records indicating that the 1990 inventory was 200 TPY. (See Exh. 64, p. 25 [Table 3].) Thus, the 1998 inventory was actually barely more than half of what it was eight ears earlier. BRG's 1998 inventory is nothing more than evidence that the emissions of the various stationary sources in Burney basin do not run at the same rate in every year (see 12/18 RT 183-184), something which is clearly discernable from the Staff's testimony. (See Exh. 64, p. 25 [Table 3].)

C. There is no evidence supporting transport of pollutants to or from the Burney basin.

BRG contends (under "C. Transport" in its Opening Brief) that there is no evidence of transport, or the degree of transport, to or from the Burney basin. This is in agreement with all the testimony from Staff, applicant, BRG, and the air district. However, further back in its brief regarding PM10, BRG disputes the testimony of air district witness Kussow that nitric acid and hydroxides in the Central Valley would not be expected to be expected to "transport" to Burney, and argues that there is transport to the Burney basin. This internal inconsistency in the BRG brief finds no support in the testimony, and is in fact contradicted by it.

D. The wood stove replacement program is appropriate mitigation for project impacts.

BRG raises various arguments regarding the adequacy of the wood stove replacement program. It contends that the requirement for dust mitigation is improper because dust is not combustion PM10. This ignores the testimony (cited in Staff's Opening Brief) that PM10 episodes in Burney are primarily a winter phenomenon caused by wood burning. The wood stove program addresses precisely that source of the problem by reducing combustion PM10 during the winter months, and in proportion to project emissions during that period. The dust mitigation is a secondary benefit that is also consistent with improved air quality, particularly in other seasons of the year. BRG acknowledges in its brief that the majority of road dust is in fact PM10, and a substantial portion of such dust is PM 2.5.

BRG also argues that the winter reduction in wood stove emissions is not comparable to increases in PM10 from the project. This argument is not explained. In fact, the testimony—cited in Staff's Opening Brief—is that the wood stove emissions are more harmful because they

occur at ground level in inhabited areas, where they are more likely to be inhaled. (Exh. 72, p. 3.)

BRG further contends that the wood stove mitigation does not meet EPA requirements that offsets be "real, surplus, enforceable, quantifiable, and permanent." This may be true in a strict sense, as there is no mechanism to force Burney residents to switch to free stoves that are cleaner. However, this argument mistakenly assumes that offsets are required by federal law and subject to federal requirements. They are not, as the air district is in compliance with federal standards. The offsets required for the project are required only pursuant to the Shasta County General Plan, which requires "appropriate" offsets. The testimony establishes that the wood stove program is appropriate.

E. VOC mitigation is adequate.

Black Ranch contends that the applicant should be required to provide twice the VOC offsets that it is otherwise required by law to provide, because they contend that applicant proffered such a proposal last May. Applicant's May offset package was rejected by Staff for various insufficiencies. Its current proposal meets all legal requirements, mitigates any cumulative impacts to a level that is less than significant, and provides probable air quality benefits. There is no legal for theoretical basis for doubling applicant's VOC obligation.

II. TRANSMISSION RELIABILITY AND CONSTRAINTS

BRG contends in its brief that the project will provide little if any electricity to California consumers. Certainly there is much evidence in the record indicating that the transmission paths over which the project's power would flow are subject to congestion, which may constrain the project's generation for customers on the electric grid. However, it is useful to briefly review in summary fashion the evidence on the transmission issue.

First, the Independent System Operator (ISO) will not allow projects to interconnect that result in reduced system reliability. (3/7 RT 140.) The project's interconnection will in no way impair the transfer capability of the California-Oregon Intertie (COI). (3/7 RT 141, 160.) The number of hours that the COI historically has experienced congestion is very small (less than 5 percent) based on two years of flow data from Bonneville Power Authority. (3/7 RT 145.) As a result, there is normally additional transfer capability available on the COI for power from the project. (3/7 RT 259.)

Second, the BRG brief quotes from a PG&E letter dated September 21, 1999, to suggest that transfer capability studies by the ISO might be based on assumptions that were "invalid". The quoted letter is Exhibit 53a, which was entered into the record as a series of letters and responses from the ISO regarding the studies in question. (See Exh. 53a, 53b, 53c, and 53d.) The testimony and referenced exhibits indicate that the quoted letter referred to study assumptions that were subsequently dropped, and that PG&E's comments were adequately addressed. (See 3/7 RT 165 *et seq.)*

The evidence is uncontroverted that the project, if built, could and would be reliably interconnected. BRG is probably correct that the project's generation would sometimes be constrained by congestion, requiring it to reduce generation when the COI is fully utilized. However, this is a market profitability issue, not a reliability or environmental issue subject to Energy Commission findings.

III. SOILS & WATER RESOURCES

A. There Is No Evidence In The Record To Support A Finding That Staff's Soil & Water Condition Of Certification 10 Can Be Deleted.

In its Opening Brief, the applicant argues that the Committee should reject Staff's Condition of Certification Soil & Water 10. The applicant claims that the condition is not necessary because it will agree to complete the aquifer tests and identify potential well impacts sufficiently prior to project operation that affected well owners will be able to receive compensation prior to project operation.

However, the only evidence in the record addressing the timing issue indicates that unless there are some changes to the project, such timing may not be feasible. For example, Mr. McFadden, the project director, testified that "sufficient storage in the Burney Water District System might not be available to complete the test." (12/19/00 RT 62) In addition, the Agreement between the Burney Water District (BWD) and the applicant cited by the applicant in its Opening Brief does not include any schedule. It merely states that the BWD shall submit "a construction and procurement schedule for the Facilities. . . to [the applicant] for its review and approval within ninety (90) days after [the applicant's] request therefore. . ." (Applicant's Testimony on Part III Topics, p. 2)[2] In other testimony, Mr. McFadden indicated that the decision to change the existing 2 million-gallon tank to a 4 million gallon tank will be made in January, implying that there hasn't even been a decision yet to expand the tank. (12/19/00 TR 140)

As a result, there is no evidence that the storage necessary to properly conduct the aquifer test will be available. Staff's proposed condition is therefore necessary to prevent potential well impacts. If the applicant now wishes to present evidence that the bigger tank will be available, it should petition to re-open the record and present that evidence. In addition, the Committee, staff and other parties are entitled to evaluate that evidence as well as to determine whether the scope of the project has changed such that the tank should now be included in the Commission's environmental review. Failure to proceed in this manner will render a Commission decision approving the project subject to legal challenge. Finally, any such proposal should include language addressing how potential impacts will be prevented in the event that the storage is not available.

[2] The agreement calls for the applicant to pay for the construction of various facilities, including an upgrade to an existing 2 million-gallon tank so that it can hold 4 million gallons. The agreement expressly states that this is not needed to provide service to the project; hence, the staff excluded the construction of the facility from its environmental review.

B. It Is Procedurally Improper For The Applicant To Propose Changes To Soil & Water Conditions 9, 11, 12, And 13 In A Brief When Those Conditions Are Not Supported By The Evidentiary Record.

In its brief, the applicant submitted new proposed conditions of certification. As a preliminary manner, staff notes that the appropriate time to do this was prior to the hearings. Had the applicant done so, the proposal would be included in the evidentiary record of the case, as would any cross-examination of the proposal that all of the parties are entitled to conduct. That did not happen, and as a result, many of the changes recommended by the applicant are not supported by the evidentiary record and must be disregarded.

1. **Soil & Water 9**

In this condition, the applicant proposes to eliminate the requirement that the aquifer tests produce measurable drawdown. However, drawdown is key to evaluating aquifer parameters and well interference and should not be eliminated from the condition. While staff understands that the applicant is concerned about a situation in which there is little or no measurable drawdown, staff believes that the timing of the tests makes that situation extremely unlikely. By using the results of the specific capacity tests (which precede the aquifer tests), the applicant should be able to place the monitoring wells for the aquifer test such that drawdown can be measured. Unfortunately, because the applicant choose to make a proposal in its brief, there is no information in the record about the likelihood of a situation in which no drawdown is measurable, or about the relative merits of alternatives to address this situation. As a result, staff encourages the Committee to adopt Soil & Water 9 as proposed. If alternative language is to be considered, staff believes that all parties should have the opportunity to discuss this issue at a workshop.

In addition, staff opposes inclusion of the applicant's proposed language that requires that the CPM to approve the aquifer test report within 30 days. There is no basis for this proposal, which would vitiate the role of the CPM's review by requiring him or her to approve the analysis, whether such approval is justified or not. We suggest that staff's language be incorporated, which requires that the CPM complete review within thirty days. Staff and the applicant may be

able to resolve any concerns about the report within thirty days, but should not be precluded from taking longer to resolve them should it be necessary.

2. **Soil & Water 11**

The applicant's proposal for Soil & Water 11 is similar to that proposed by staff. However, we note the following difficulties with the amendments the applicant has recommended. First, the language should be clear that any well becomes "potentially impacted" if the maximum drawdown that occurs at any time during the thirty years equals or exceeds two feet.[3] The current language is vague, and could be interpreted to mean that drawdown could be averaged over thirty years.

Second, we believe that the condition should require that the computer files used in the development of the analysis be provided to the CPM, and therefore disagree with the applicant's language deleting that requirement. The CPM is responsible for ensuring a thorough review of the report, including the files that include the aquifer parameter and pumping values. Without full documentation of the well interference analysis, staff will not be able to verify how the drawdown impacts have been defined. Once again, there is no evidence in the record about the importance of the language we propose for this condition (or about the problems created by the applicant's language) because we were not aware until after the close of hearings of the applicant's proposal. We believe that staff's language should be adopted by the Commission, or, in the alternative, a workshop should be held to discuss alternative approaches.

Finally, we note that the proposed language implies that the CPM must approve the report within 30 days. This is similar to the applicant's proposal for Soil & Water 9, and again, we see no basis for this proposal, as it potentially eliminates a CPM review by requiring approval of the analysis, whether approval is justified or not. We suggest that staff's language be incorporated, which requires that the CPM complete review within thirty days. Staff and the applicant may be

[3] As noted in our Opening Brief, staff believes the evidence in the record, particularly the testimony of Mr. Hathaway calls for a drawdown trigger of two feet, rather than five feet. In addition, we believe such wells are "impacted", not potentially impacted"; further discussion of this point is included in our discussion of Soil & Water 12 & 13.

able to resolve any concerns about the report within thirty days, but should not be precluded from taking longer to resolve them should it be necessary.

3. **Soil & Water 12 & 13**

The applicant proposed to combine Soil & Water 12 and Soil & Water 13 into a new Soil & Water 12. We have incorporated our comments on both conditions in this section.

Staff has grave concerns about the applicant's proposal. First, the applicant's proposal to change the purpose of the well interference test is completely unjustified. Staff's proposed condition specifies that the well interference test will be used to identify each well that may experience a drawdown of two feet or more, as well as the extent of the drawdown in each such well. The applicant would then be required to mitigate these identified impacts. No one challenged this recommendation at the hearing, nor did any party enter evidence indicating that this was not appropriate use of this test. In contrast, the applicant now proposes that it use the drawdown impacts identified by the results to specify wells that are "potentially impacted". These impacts would not necessarily be mitigated; rather, the *applicant* would evaluate the well to determine whether mitigation is required, based on whether the well is "physically impacted". "Physically impacted" wells are those that "cannot produce the same or greater quantity of water as they did

The applicant's proposal raises several major problems. Most significantly, the proposal lacks critical details necessary to understand its effectiveness. The criterion to be used to determine whether mitigation is provided – whether the well produces a lesser quantity of water that it did prior to project pumping – sounds simple, but is in fact extremely nebulous. There is simply no information that explains how a comparison of production levels would be conducted. What method does the applicant propose to use to determine whether the criterion has been met? What baseline would be used? How would baseline data be collected? How long would baseline data be collected? How would seasonal changes in use be accounted for? These are a few examples of the details that must be evaluated by all parties before a conclusion about the effectiveness and the desirability of such an approach can be reached. Staff believes that without both the information itself and an opportunity for staff and parties to ask additional questions, the

proposal constitutes only a vague outline of an idea of undetermined efficacy. The Committee currently has no evidence in the record that would allow it to incorporate the proposal as appropriate mitigation for well impacts.

In addition, we note that in its proposal, it is the applicant that would be responsible for determining whether mitigation is required and which mitigation is appropriate. The CPM's only role is to "inform the project owner and the Responding Owners of the approved mitigation payment." The proposal does not include a discussion of the CPM's review or of the process to be followed should a well owner disagree with the applicant's conclusions. Apparently, the applicant wants to be the only party with the authority to determine whether an identified well impact should be mitigated as well as what the mitigation should be. Staff strongly encourages the Committee not to substitute a mitigation trigger that consists of an objectively determined modeling result of drawdown reviewed by the CPM for one that is a subjective determination by the applicant. Only the staff proposal will ensure that the Commission can meet its responsibility to ensure that the identification of impacts and provision of mitigation are reviewed and approved by an objective third party.

Finally, we note that the applicant's proposal for compensation for increased energy costs doesn't include a requirement that the applicant provide meters for those wells affected by the projects. Staff believes that if impacts have been determined to occur because of the applicant's project, and the provision of mitigation requires the use of meters, it is the applicant's responsibility to provide those. Staff encourages the Committee not to eliminate this requirement.

4. **General Timing Issues**

The applicant's proposal is complex. Because we have not had a workshop on any of the ideas contained in the proposal, or had the opportunity to ask questions, we cannot determine how, or even if, the proposal would work. We are particularly concerned about the many timing issues raised by the proposal. Staff is willing to consider alternative approaches to the conditions, but believes that they should be discussed in a workshop, the results of which would be subject to hearing. If the applicant does not wish to use this approach, staff strongly recommends that the

Committee adopt staff's proposed conditions. The impacts that could be created by this project are far too important to resolve by a proposal that is made in a brief and that has not even been subject to public discussion, much less the formal hearing process required by the statutes and regulations governing the siting process.

Dated:_____

Respectfully submitted,

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